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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,647	08/17/2001	Douglas Anthony Able	2001-0099.01	4582
21972	7590	05/15/2006	EXAMINER	
LEXMARK INTERNATIONAL, INC. INTELLECTUAL PROPERTY LAW DEPARTMENT 740 WEST NEW CIRCLE ROAD BLDG. 082-1 LEXINGTON, KY 40550-0999			POON, KING Y	
		ART UNIT	PAPER NUMBER	
		2625		
DATE MAILED: 05/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/932,647	ABLE ET AL.
	Examiner	Art Unit
	King Y. Poon	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 24 February 2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 3 and 5-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 3 and 5-17 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 July 2005 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date . . . . .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/24/2006 has been entered.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference number 236 is not mentioned in the description. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 5-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5: Claim 5 is claiming "starting a ready timer for the predetermined time interval when a predetermined control signal is entered into said printer wherein said printer is in said ready status and said mirror is at said operating speed and executing one of the following (i) continuing said printer in said ready status when said timer does not reach said predetermined time interval; or (ii) changing said printer to said on-but-not-ready status when said timer reaches said predetermined time interval."

From the claim language, it is unclear that claim 5 is claiming: 1) the printer is executing one of the following as claimed, 2) the mirror is executing one of the following as claimed 3) the wherein is referring to the time period after starting a ready timer, 4) the wherein is referring to the time period before starting a ready timer, 5) the wherein is referring the time period that includes both the time after starting a ready timer and the time before starting the ready timer.

Similar claim language is being claimed in claims 9 and 13 and are rejected for the same reasons as indicated in claim 5.

Claims 3, 6-8, 10-12, 14-17 are rejected under 35 U.S.C. 112, second paragraph because they depend on rejected claims 5, 9, 13.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3, 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) in view of Nagasaka (5,241,349).

Regarding claim 5: Smith teaches a method of controlling a printer (column 2, line 50) having a ready status (print mode, column 1, lines 25-30) and an on-but-not ready status (idle mode, column 1, lines 35-40) and including a mirror having an operating speed (column 1, lines 45-50) comprising: determine a predetermined time interval (period of time, column 1, lines 25-30, column 3, lines 25-35) that is less than the amount of time necessary for the mirror to coast from the operating speed to a full stop plus the amount of time necessary to accelerate from the full stop to said operating speed (it is inherent that, in Smith's printer, there exist a time X for the mirror to slow from said operating speed to a full stop and then return to said operating speed; the predetermined time must be less than time X because the mirror has not come to a full stop yet during the predetermined time); starting a time for a predetermined time interval

(period of time, column 1, lines 35-40) when a predetermined control signal is entered into the printer wherein said printer is in said ready status (print mode, column 1, lines 25-30, column 3, lines 25-35) and said mirror is at said operating speed and executing one of the following: continue the printer in the ready status when the time does not reach the predetermined time interval (column 1, lines 34-38).

It is inherent that a computer/processor uses timer to count a predetermined period of time and requires a signal to start the timer.

Nagasaki shows a ready timer (S3 fig. 5) to count a predetermined period of time (S5, fig. 5) that the system is in ready state and a timer start signal (S4, fig. 5).

Therefore, it would have been obvious that Smith has a ready timer and a timer start signal such that Smith system would be able to function.

Note: the predetermined control signal when interprets broadly, would be the timer start signal or the predetermined signal that indicates there will be more printing coming or not, column 4, lines 10-32, column 2, lines 20-31).

Regarding claim 3: Smith et al. teach the method as in claim 1 and further teach a printer receiving scanner-dependent input as the predetermined signal (column 3, lines 1-6). Note that said signal defining said predetermined time based in the time between said scanned pages, although not mentioned specifically by Smith et al., is essential if the input from the scanner is to function without the printer going into idle mode before the scanner is finished sending input into the printer. The timing between scanned pages is inherently accounted for in the timing for going into idle mode, otherwise the printer may go into idle mode before the scanner can send another page.

Therefore, said signal defining said predetermined time based in the time between said scanned pages is inherent to the teachings of Smith et al.

Regarding claims 6: Smith teaches wherein the ready timer is started upon the completion of any print page (column 3, lines 25-35, when the printing is completed, the printer is inactive).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Nagasaka (5,241,349) as applied to claim 5 and further in view of Muto (US 5,521,686).

Regarding claim 7: Smith does not teach resetting the ready timer, although it is well known in the art the timer is reset in order to be reused.

Muto teaches it is well known in the art to reset a timer such that the timer could be used to count time again (column 8, lines 10-20).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to reset the ready timer such that the ready timer can be reused again.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Nagasaka (5,241,349) as applied to claim 5 and further in view of Jordon (US 6,078,343).

Regarding claim 8: Smith teaches the control signal is entered into the printer when print data is delivered to a control unit in the printer (column 3, lines 22-35, column 4, lines 1-33).

Smith does not teach the control unit is part of a print engine.

Jordan, in the same area of printer, teaches the control unit is within the print engine (fig. 1, column 3, lines 20-21).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include the control unit in the print engine.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Jordon because it would allowed Smith's invention to be applied to printer that includes the controller in the print engine.

9. Claims 9-11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) in view of Hibino (US 5,636,332).

Regarding claims 9, 13: Smith teaches a system (fig. 1) for controlling a printer (column 2, line 50) having a ready status (print mode, column 1, lines 25-30) and an on-but-not ready status (idle mode, column 1, lines 35-40) comprising: a printer including a time to be counted (period of time, column 1, lines 35-40), a mirror (column 1, lines 29-30) having an operating speed and an automatic control apparatus (column 3, lines 22-25) and input unit for inputting a predetermined control signal into said printer; wherein

said automatic control apparatus is configured to: start counting a predetermined time interval when said predetermined control signal is entered into said printer wherein said printer is in said ready status (print mode, column 1, lines 25-30, column 3, lines 25-35) and said mirror is at said operating speed and executing one of the following: continue the printer in the ready status when the time does not reach the predetermined time interval (column 1, lines 34-38).

It is inherent that a computer/processor uses timer to count a predetermined period of time and requires a signal to start the timer.

Hibino shows a ready timer (column 5, lines 10-15) to count a predetermined period of time (S5, fig. 5) that the system is in ready state.

Therefore, it would have been obvious that Smith has a ready timer and a timer start signal such that Smith system would be able to function.

Smith does not teach an input capable of entering a predetermined time interval.

Hibino teaches an input to enter the predetermined time interval (column 5, lines 1-10).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include an input capable of entering a predetermined time interval.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Hibino because it would have allowed the predetermined time to be adjusted to suit the user/operator's needs as taught by Hibino at column 5, lines 1-10.

Note: the predetermined control signal when interprets broadly, would be the timer start signal or the predetermined signal that indicates there will be more printing coming or not, column 4, lines 10-32, column 2, lines 20-31).

Regarding claims 10, 14: Smith teaches wherein the ready timer is started upon the completion of any print page (column 3, lines 25-35, when the printing is completed, the printer is inactive).

Regarding claims 11, 15: Smith et al. teach the method as in claim 9 and further teach a printer receiving scanner-dependent input as the predetermined signal (column 3, lines 1-6). Note that said signal defining said predetermined time based in the time between said scanned pages, although not mentioned specifically by Smith et al., is essential if the input from the scanner is to function without the printer going into idle mode before the scanner is finished sending input into the printer. The timing between scanned pages is inherently accounted for in the timing for going into idle mode, otherwise the printer may go into idle mode before the scanner can send another page. Therefore, said signal defining said predetermined time based in the time between said scanned pages is inherent to the teachings of Smith et al.

10. Claims 12, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Hibino as applied to claims 9, 13 and further in view of Jordon (US 6,078,343).

Regarding claims 12, 16: Smith teaches the control signal is entered into the printer when print data is delivered to a control unit in the printer (column 3, lines 22-35, column 4, lines 1-33).

Smith does not teach the control unit is part of a print engine.

Jordan, in the same area of printer, teaches the control unit is within the print engine (fig. 1, column 3, lines 20-21).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include the control unit in the print engine.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Jordon because it would allowed Smith's invention to be applied to printer that includes the controller in the print engine.

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,359,642) and Hibino as applied to claim 13 and further in view of Nagasaka (US 5,241,349).

Regarding claim 17: Smith does not teach the control unit is a microprocessor.

Nagasaka, in the same area of controlling printing apparatus teaches using a microprocessor as a control unit.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith to include: using a microprocessor as the control unit.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Smith by the teaching of Nagasaka because a microprocessor is small, cheap and widely available.

### ***Response to Arguments***

12. Applicant's arguments filed on 2/24/2006 have been fully considered.

With respect to applicant's argument that the newly amended claims are allowable, has been considered.

In reply: the newly amended claims are not in condition for allowance because of the reason given in the detailed office action. Please see detailed office action.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edwards Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 3, 2006



KING Y. POON  
PRIMARY EXAMINER